#### PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

HILLERINGMANN, Jochen
Deichmannhaus
Bahnhofsvorplatz 1
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ALLEMAGNE

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY

2 9 MAI 2006

(PCT Rule 71.1)

Pate of mailing
day/month/year) 26.05.2006

Applicant's or agent's file reference

032828woHibu

International application No.

International filing date (day/month/year)

PCT/EP2004/002588 12.03.2004

IMPORTANT NOTIFICATION

Priority date (day/month/ye. 12.03.2004

Applicant

GENERAL ELECTRIC COMPANY

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



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## **PATENT COOPERATION TREATY**

## **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file refe	FOR FURTHER A	CTION Sec	e Form PCT//PEA//16	
International application No PCT/EP2004/002588	International filing date 12.03.2004		Priority date <i>(day/month/year)</i> 2.03.2004	
International Patent Classific INV. H02J3/18	ation (IPC) or national classification and	IPC	· · · · · · · · · · · · · · · · · · ·	
Applicant GENERAL ELECTRIC				
This report is the int     Authority under Artic	ernational preliminary examination re de 35 and transmitted to the applica	eport, established by this int	ornational Preliminary Examining	
2. This REPORT consists of a total of 5 sheets, including this cover sheet.				
3. This report is also accompanied by ANNEXES, comprising:				
a. 🔲 sent to the applicant and to the International Bureau) a total of sheets, as follows:				
II sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).				
beyond t	hich supersede earlier sheets, but whe disclosure in the international appendational appendational appendational appendational sox	hich this Authority considers dication as filed, as indicate	s contain an amendment that goes d in item 4 of Box No. I and the	
sequence list	nternational Bureau only) a total of (i ing and/or tables related thereto, in c equence Listing (see Section 802 of	electronic form only, as indi	cated in the Supplemental Box	
4 This report contains indications relating to the following items:				
🖾 Box No. I 💛 Ba	sis of the report			
☐ Box No. II Pri	iority			
☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
	☐ Box No. VII Certain defects in the international application			
⊠ Box No. VIII Ce	rtain observations on the internation	al application		
Date of submission of the demand		Date of completion of this rep	ort	
10.01.2006		26.05.2006		
Name and mailing address of the international proliminary examining authority:		Authorized officer		
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Calarasanu, P		
		Lelephone No. +49 89 2399-2	28/0	

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/002588

	Box No. I	Basis of the report			
1.	. With regard filed, unless	I to the <b>language</b> , this report is based on the international application in the language in which it was otherwise indicated under this item.			
	□ This re which i	☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:			
	☐ pub	rnational search (under Rules 12.3 and 23.1(b)) lication of the international application (under Rule 12.4) rnational preliminary examination (under Rules 55.2 and/or 55.3)			
have bee		I to the <b>elements</b> * of the international application, this report is based on <i>(replacement sheets which</i> furnished to the receiving Office in response to an invitation under Article 14 arc referred to in this originally filed" and are not annexed to this report):			
	Description	, Pages			
	1-11	as originally filed			
	Claims, Nun	ıbers			
	1-24	as originally filed			
	Drawings, S	heets			
	1/3-3/3	as originally filed			
	TT a seque	ence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing			
3.	<ul> <li>□ The amendments have resulted in the cancellation of:</li> <li>□ the description, pages</li> <li>□ the claims, Nos.</li> <li>□ the drawings, sheets/figs</li> <li>□ the sequence listing (specify):</li> <li>□ any table(s) related to sequence listing (specify):</li> </ul>				
4.	had not bee Supplement  the c  the c  the c  the c	This report has been established as if (some of) the amendments annexed to this report and listed below ad not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the upplemental Box (Rule 70.2(c)).  The description, pages the claims, Nos. the drawings, sheets/figs the drawings, sheets/figs any table(s) related to sequence listing (specify):			
	* 75 11.2	om A armition come or all of those cheets may be marked for and a			

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims 3,5,6,8,9,13,16,17,18,19,24

No: Claims 1,2,4,7,10,11,12,14,15,20,21,22,23

Inventive step (IS) Yes: Claims 8,9

No: Claims 1, 2,3,4,

5,6,7,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24

industrial applicability (IA) Yes: Claims 1-24

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

#### Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

#### Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: US 5798631 D2: US 5225712 D3: WO 02/103879

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1,10,14,21 is not new in the sense of Article 33(2) PCT. Concerning claim 1, document D1 discloses (column 2, line 65 - column 19, line 59; figures 1-18) a method for operating a frequency converter (26,32,38) of a generator (20) connected to a wind energy turbine and to a grid through said frequency converter comprising an AC/DC/AC converter.

The frequency converter operates for maximizing the output power when the grid voltage has normal values, but also for generating reactive power when voltage dips, implying substantial grid voltage drops, occur (see column 16, lines 25 - 32).

Thus, the subject-matter of claim 1 is not novel over document D1.

The same objection is valid for the independent apparatus claim 14.

Concerning claim 10, document D2 (column 8, line 40 - column 30, line 59; figures 1-25) describes a method applied to the same frequency converter as in claim 1, but operating under normal grid condition and with the generator not being in its operating state.

The frequency converter furnishes reactive current to the grid by controlling the dc/AC grid-side power converter.

Thus the subject-matter of claim 10 is not novel over D2.

The same objection is valid for the independent apparatus claim 21.

- 2. Dependent claims 2 to 7, 11 to 13, 15 to 20, 22 to 24 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, for the following reasons:
- the subject-matter of claims 2,4,7,15,20 is known from D1;
- the subject-matter of claims 3,5,6,11,12,16,17,18,19,22,23 is known from D2;
- the subject-matter of claims 13,24 is known from D3.

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

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3. The combination of the features of dependent claim 8 and 9 is neither known from, nor rendered obvious by, the available prior art.

#### Re Item VIII

#### Certain observations on the international application

1. Although claims 1 and 10, as method claims, and claims 14 and 21, as apparatus claims, have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and/or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.